**Chapter 3 – Section 2** Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Note Taking Guide**

**(Slides 16 -21)**

There are \_\_\_\_\_\_\_\_ naturally occurring elements but there are over \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ minerals.

WHY?

**CRYSTALLIZATION**:

Minerals can form in **2** ways:



**Magma –**

**Lava-**

Minerals can form \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ below the earth’s surface. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ crystals can form.

Cooling speed affects the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the crystals.

**FAST cooling:**

**SLOW cooling:**



Some minerals \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in water and over time the water \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and crystals form. This happens in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and on the earth’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**SECTION 3 (slides 23-29)**

In your lifetime you will use approximately \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_pounds of minerals, metals and fuel.

Mineral deposits are found in the earth and on the earth’s surface. There are two general types of mineral deposits: 1)

2)

Mining is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of minerals from the ground.

**There are 3 types of mines**:

1)

2)

3)

**SMELTING**:

**ALLOYS:**

Examples:

Top Minerals Mined in SC: